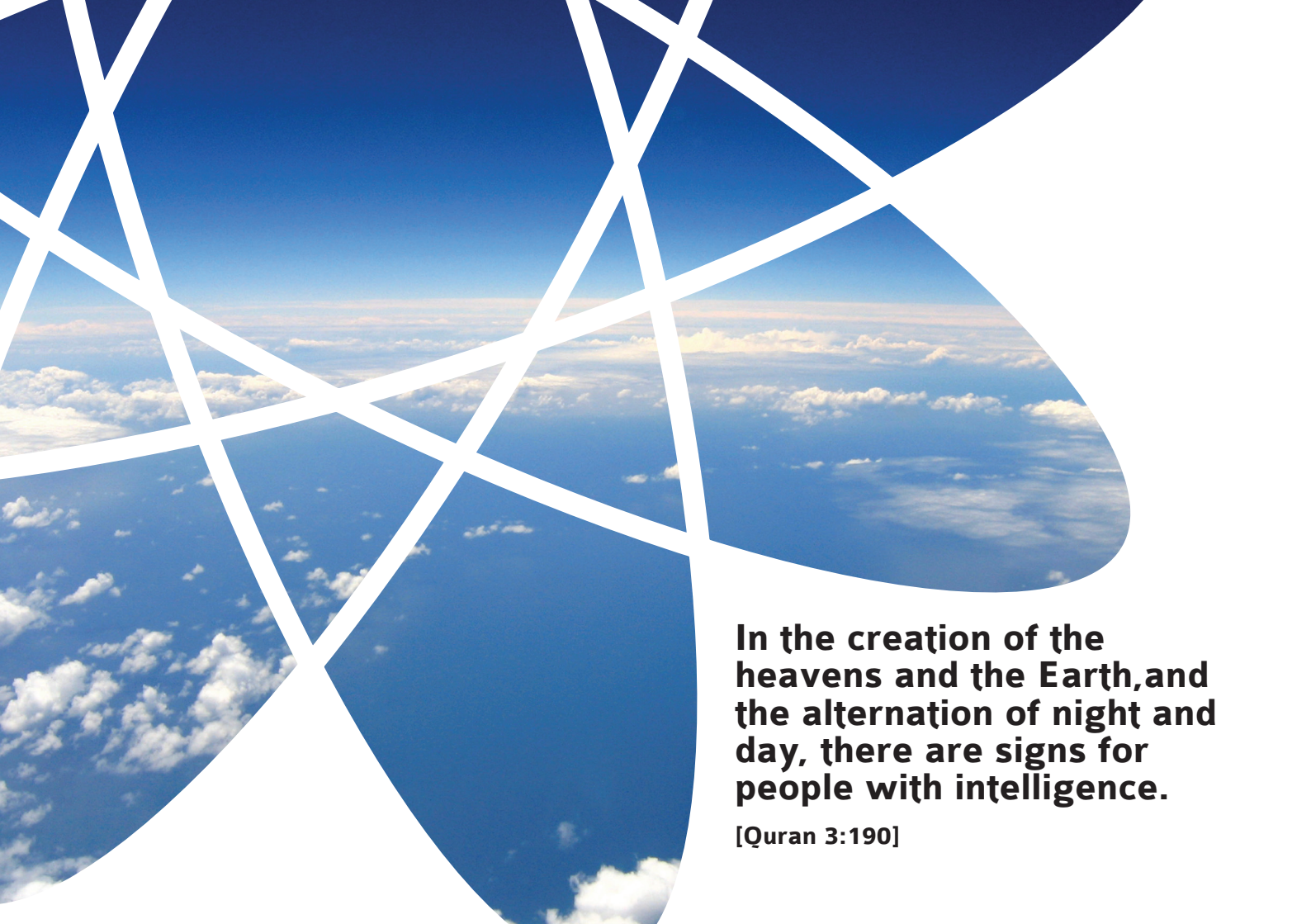


SCIENCE IN THE QURAN

one reason

CONTENTS

Introduction	4
Concept of God	6
Scientific Facts in the Quran	9
1. Origin of Life	10
2. Iron	11
3. Sky's Protection	12
4. Mountains	13
5. Expansion of the Universe	14
6. Sun's Orbit	15
7. The Ocean	16
8. Lying & Movement	18
9. Pain Receptors	20
Conclusion	22



**In the creation of the
heavens and the Earth, and
the alternation of night and
day, there are signs for
people with intelligence.**

[Quran 3:190]

INTRODUCTION

Ever since the dawn of mankind, we have sought to understand nature and our place in it. In this quest for our purpose of life many people have turned to religion. Most religions are based on books claimed by their followers to be divinely inspired, without any proof. Islam is different because it is based upon reason and proof.

There are clear signs that the book of Islam, the Quran, is the word of God. There are many reasons that support this claim:

There are scientific and historical facts found in the Quran which were unknown to the people at the time, and have only been discovered recently.

The Quran came in a unique style of language that cannot be replicated, this is known as the 'Inimitability of the Quran'.

There are predictions made in the Quran and by the Prophet Muhammad (peace be upon him) which have come to pass.

This booklet lays out and explains the scientific facts that are found in the Quran, centuries before they were discovered. It is important to note that the Quran is not a book of science, but a book of 'signs'. These signs are there for people to recognise God's existence and revelation. Science sometimes takes a 'U-turn', what is scientifically correct today is false a few years later. In this booklet only established scientific facts are considered, not just theories or hypotheses. Before we move onto the scientific facts found in the Quran, the next section is a quick introduction to the concept of God in Islam.




CONCEPT OF GOD

In Islam, God is nothing like a human being or like anything that we can imagine. The concept of God is summarised in the Quran as:

SAY, HE IS GOD, THE ONE, GOD, THE ABSOLUTE, HE DOES NOT GIVE BIRTH, NOR WAS HE BORN, AND THERE IS NOTHING LIKE

HIM*. [112:1-4] * God is not male or female, the word 'Him' when used for God does not refer to gender



God gave us intelligence so we could use it to recognise his existence and to follow his guidance. When we reflect upon the nature of our world, we see order everywhere, from the water cycle to the movement of the Earth around the Sun. Commenting on the order found in the universe, the physicist Stephen Hawking explains that the overwhelming impression:

'IS ONE OF ORDER, THE MORE WE DISCOVER ABOUT THE UNIVERSE, THE MORE WE FIND THAT IT IS GOVERNED BY RATIONAL LAWS.'^[1]

This observation is shared by the vast majority of scientists.

Since the universe has order and is governed by the 'laws of science', we should question how this order came about. The most effective way to answer this question is to reason to the best conclusion. Take your mobile phone for example: your phone is made of glass, plastic and metal. Glass comes from sand, plastic comes from oil and metal is extracted from the ground. Imagine you were walking in a desert (where there is lots of oil, sand and metals in the ground), and you found a mobile phone lying around. Would you believe that it came together by itself? That the Sun shone, the wind blew, lightning struck, the oil bubbled to the surface and mixed with the sand and metal, and over millions of years the mobile phone came together by chance?

No one would believe such an explanation. A mobile phone is clearly something that was put together in an organised way, so



SCIENTIFIC FACTS IN THE QURAN

The Quran was revealed to the Prophet Muhammad (pbuh) in the 7th century. Science at the time was primitive. There were no telescopes, microscopes or anything even close to the technology we have today.

People believed that the Sun orbited the Earth and that the sky was held up by big pillars at the corners of a flat Earth. Within this backdrop the Quran was revealed, and it contains many scientific facts on topics ranging from astronomy through to biology.

Some people may claim that the Quran was changed as new scientific facts were discovered. But this cannot be the case, because it is a historically documented fact that the Quran is preserved in its original language [2]. The Quran was written down and memorised by people during the lifetime of the Prophet Muhammad (pbuh). One of the copies of the Quran which was written a few years after the death of the Prophet Muhammad (pbuh) is preserved in a museum in Uzbekistan. This copy is over 1,400 years old and is exactly the same as the Arabic Quran that we have today [3].

The following are nine scientific facts found in the Quran:

it would be rational to believe that it must have an organiser. In the same way, when we see the order in the universe around us, isn't it rational to say that the universe has an organiser?

This 'organiser' is best explained by the existence of God. God is the one who brought about the order in the universe. Since God created the world, it makes sense that he would send a message to us about our purpose in life. Muslims believe this message is the Quran.

* God is not male or female, the word 'Him' when used for God does not refer to gender

1 ORIGIN OF LIFE

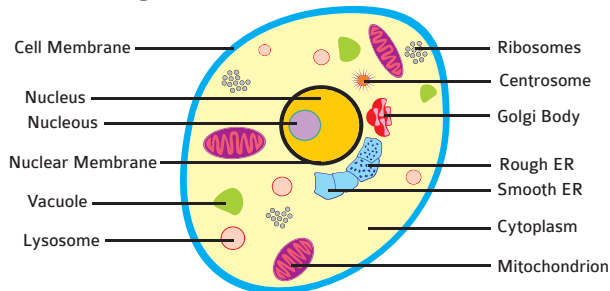
Water is essential for all living things. We all know that water is vital to life, but the Quran makes a very unusual claim:

...WE MADE EVERY LIVING THING FROM WATER? WILL THEY NOT BELIEVE? [21:30]

In this verse, water is pointed out as the origin of all life. All living things are made of cells. We now know that cells are mostly made up of water [4]. For example, 80% of the cytoplasm (basic cell material) of a standard animal cell (pictured below) is described as water in biology textbooks.

The fact that living things consist mostly of water was discovered only after the invention of the microscope. In the deserts of Arabia, the last thing someone would have guessed is that all life came from water.

ANIMAL CELL



2 IRON

Iron is not natural to the Earth. It did not form on the Earth but came down to Earth from outer space. This may sound strange but it's true.

Scientists have found that billions of years ago the Earth was struck by meteorites. These meteorites were carrying iron from distant stars which had exploded [5].

The Quran says the following on the origin of iron:

WE SENT DOWN IRON WITH ITS GREAT INHERENT STRENGTH AND ITS MANY BENEFITS FOR HUMANKIND [57:25]

God uses the words 'sent down' for iron. It is clear from the verse that iron is not an Earthly material, but was sent down for the benefit of humanity. The fact that iron came down to Earth from outer space is something which could not be known by the primitive science of the 7th century.

3 SKY'S PROTECTION

The sky plays a crucial role in protecting the Earth. The sky protects the Earth from the lethal rays of the Sun. If the sky did not exist then the Sun's radiation would have killed off all life on Earth.

It also acts like a blanket wrapped around the Earth, to protect it from the freezing cold of space. The temperature just above the sky is approximately -2700°C . If this temperature was to reach Earth then the planet would freeze over instantly. The sky also protects life on Earth by warming the surface through heat retention (greenhouse effect), and reducing temperature extremes between day and night [6]. These are some of the many protective functions of the sky.

The Quran asks us to consider the sky in the following verse:

WE MADE THE SKY A PROTECTIVE CEILING. AND YET THEY ARE TURNING AWAY FROM OUR SIGNS! [21:32]

The Quran points to the sky's protection as a sign of God. The protective properties of the sky were discovered by scientific research conducted in the 20th century.



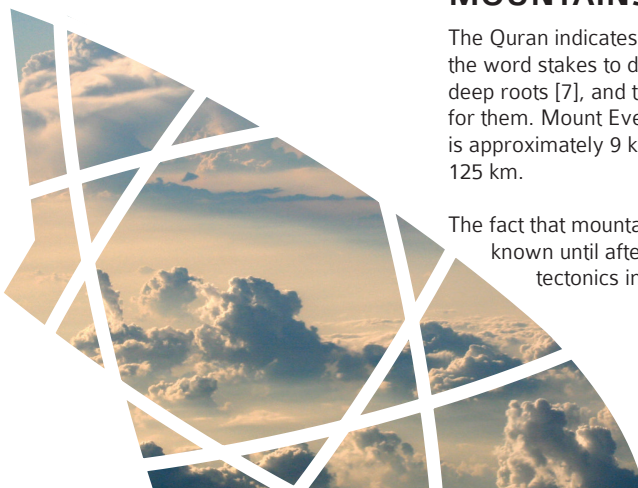
4 MOUNTAINS

The Quran draws our attention to a very important characteristic of mountains:

DID WE NOT MAKE THE EARTH A RESTING PLACE? AND THE MOUNTAINS AS STAKES? [78:6-7]

The Quran indicates that mountains have deep roots by using the word stakes to describe them. In fact, mountains do have deep roots [7], and the word 'stakes' is an accurate description for them. Mount Everest (pictured above), the height of which is approximately 9 km above ground, has a root deeper than 125 km.

The fact that mountains have deep stake-like roots was not known until after the development of the theory of plate tectonics in the beginning of the 20th century [8].



5 EXPANSION OF THE UNIVERSE

At a time when the science of astronomy was still primitive, the expansion of the universe was described in the Quran:

AND IT IS WE WHO HAVE BUILT THE UNIVERSE WITH [OUR CREATIVE] POWER AND KEEP EXPANDING IT.

[51:47]

The fact that the universe is expanding was discovered in the last century. The physicist Stephen Hawking in his book 'A Brief History of Time' wrote, 'The discovery that the universe is expanding was one of the great intellectual revolutions of the 20th century.' [9]. The Quran mentioned the expansion of the universe even before the invention of the telescope!

6 SUN'S ORBIT

In 1512 the astronomer Nicholas Copernicus put forward his theory that the Sun is motionless at the centre of the solar system, and that the planets revolve around it.

The belief that the Sun is stationary was widespread amongst astronomers until the 20th century. It is now a well-established scientific fact that the Sun is not stationary, but is moving in an orbit around the centre of our Milky Way galaxy [10]. The Quran mentions the orbit of the Sun:

IT IS HE WHO CREATED NIGHT AND DAY, THE SUN AND THE MOON, EACH FLOATING IN ITS ORBIT. [21:33]

The Quran would have been wrong according to astronomers just a couple of decades ago. But we now know that the Quranic account of the Sun's motion is consistent with modern Astronomy.

7 THE OCEAN

The Quran uses imagery to convey its deep meanings; here it describes the state of the unbelievers as:

**DARKNESS OUT IN A DEEP OCEAN
WHICH IS COVERED BY WAVES,
ABOVE WHICH ARE WAVES, ABOVE
WHICH ARE CLOUDS, LAYERS OF
DARKNESS, ONE UPON THE OTHER.
WHEN ONE PUTS OUT HIS HAND
[THEREIN], HE CAN HARDLY SEE IT.
THOSE GOD GIVES NO LIGHT TO,
THEY HAVE NO LIGHT.** [24:40]

It is commonly thought that waves only occur on the surface of the ocean. However, oceanographers have discovered that there are internal waves that take place below the surface of the ocean. These waves are invisible to the human eye, and can only be detected by specialist equipment [11]. The Quran mentions darkness in a deep ocean above which are waves, above which are waves, then clouds above that. This description is not only remarkable because it describes the internal waves in the ocean, but also because it describes darkness deep in the ocean. A human being can dive no more than 70 metres without breathing equipment. Light is present at that depth, but if we go down 1,000 metres it is completely dark [12]. 1,400 years ago, there were no submarines or specialist equipment to discover internal waves or the darkness deep inside the oceans.



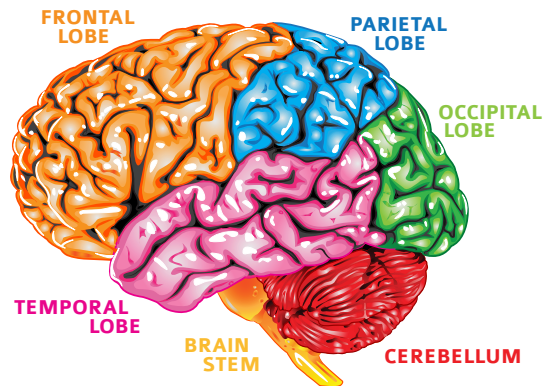
8 LYING & MOVEMENT

There was a cruel oppressive tribal leader named Abu Jahl who lived during the time of Prophet Muhammad (pbuh). God revealed a verse of the Quran to warn him:

NO INDEED! IF HE DOES NOT STOP, WE WILL SEIZE HIM BY THE FOREHEAD, HIS LYING, SINFUL FOREHEAD. [96:15-16]

God does not call this person a liar, but calls his forehead (the front part of the brain) 'lying' and 'sinful', and warns him to stop.

This verse is significant for two reasons. The first is that the front part of our brain is responsible for voluntary movement [13]. This is known as the frontal lobe.



A book titled 'Essentials of Anatomy and Physiology' which includes the results of research on the functions of this area states:

THE MOTIVATION AND THE FORESIGHT TO PLAN AND INITIATE MOVEMENTS OCCUR IN THE ANTERIOR PORTION OF THE FRONTAL LOBES (SEE PICTURE TO LEFT), THE PREFRONTAL AREA [14]. THE PART OF THE BRAIN THAT IS RESPONSIBLE FOR MOVEMENT IS SAID TO BE SEIZED IF THE MAN DOES NOT STOP.

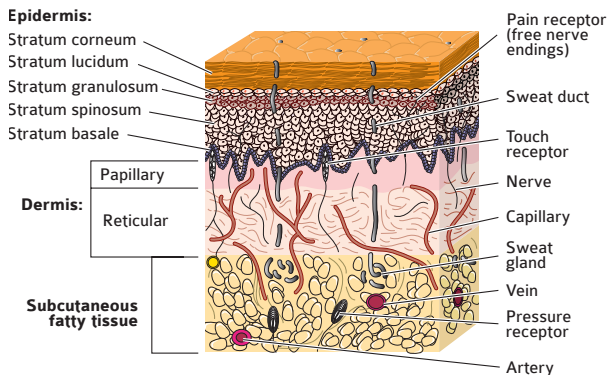
Secondly, numerous studies have shown that this same region (frontal lobe) is responsible for the lying function of the brain [15]. During one such study at the University of Pennsylvania in which volunteers were asked questions during a computerized interrogation, it was found that when the volunteers were lying there was significantly increased activity in the prefrontal and premotor cortices (frontal lobe region pictured left) [16].

The front part of the brain is responsible for movement and lying. The Quran links movement and lying to this area. These functions of the frontal lobe were discovered with medical imaging equipment which was developed in the 20th century.

9 PAIN RECEPTORS

For a long time it was thought that the sense of feeling and pain was dependent on the brain. However, it has been discovered that there are pain receptors present in the skin [17]. Without these pain receptors, a person would not be able to feel pain.

The picture below shows a cross section of the skin.



Consider the following verse on pain:

WE SHALL SEND THOSE WHO REJECT OUR REVELATIONS TO THE (HELL) FIRE. WHEN THEIR SKINS HAVE BEEN BURNED AWAY, WE SHALL REPLACE THEM WITH NEW ONES SO THAT THEY MAY CONTINUE TO FEEL THE PAIN: GOD IS ALMIGHTY, ALL-WISE. [4:56]

God tells the people who reject his message that when they are in Hell and their skins are burnt off (so they can't feel any pain), he will give them new skins so that they continue to feel the pain. The Quran makes it clear that pain is dependent upon the skin. The discovery of pain receptors in the skin is a fairly recent discovery for biology.

CONCLUSION

These are just some of the many scientific facts found in the Quran. It is important to note that the Quran is not a book of science, but that it is consistent with science.

To claim that scientific facts in the Quran are due to coincidence would be irrational. The best explanation is that God revealed this knowledge to the Prophet Muhammad (pbuh).

Just like the Quran contains knowledge about the natural world, it also contains information about the inner dimensions of our souls. It relates to our feelings, wants and needs. The Quran informs us that we have a purpose in life, and that following God's guidance will lead us to inner peace in this life, and Paradise in the hereafter. And that rejection of his message will lead to depression in this life and Hellfire after death.

For more information on the scientific facts in the Quran, the proof for God's existence, the purpose of life and how to gain inner peace, please visit www.OneReason.org

**WE SHALL SHOW THEM OUR SIGNS
IN THE UNIVERSE AND WITHIN
THEMSELVES, UNTIL IT BECOMES
CLEAR TO THEM THAT THIS IS THE
TRUTH. IS IT NOT ENOUGH THAT YOUR
LORD IS THE WITNESS OF ALL THINGS?**

[QURAN 41:53]




REFERENCES

- [1] Anthony Flew, *There Is a God: How the World's Most Notorious Atheist Changed His Mind*, HarperOne, 2008.
- [2] *The Magnificent Qur'an: A Unique History of Preservation*, Exhibition Islam, 2010.
- [3] <http://news.bbc.co.uk/1/hi/world/asia-pacific/4581684.stm> retrieved 18 June 2012, 16:47.
- [4] Bruce Alberts, *Essential Cell Biology*, Garland Science, 2009.
- [5] M.E.Walrath, *History of the Earth's Formation*, BiblioBazaar, 2009.
- [6] Joseph M.Moran, *Meteorology: The Atmosphere and Science of Weather*, Prentice Hall, 1996.
- [7] Terry A.Hicks, *How Do Mountains Form?*, Marshall Cavendish Corporation, 2010.
- [8] Naomi Oreskes, *Plate Tectonics: An Insider's History Of The Modern Theory Of The Earth*, Westview Press, 2002.
- [9] Stephen Hawking, *A Brief History Of Time: From Big Bang To Black Holes*, Bantam, 1995.
- [10] Lambert M. Surhone, *Orbital Period: Orbit, Sun, Earth, Conjunction, Orbital Node, Apsis, Semi-Major Axis*, Betascript Publishers, 2010.
- [11] Meredith Grant Gross, *Oceanography: A View of Earth*, Prentice-Hall, 1982.
- [12] Danny Elders, *Oceans*, Beazley, 1991.
- [13] <http://www.ncbi.nlm.nih.gov/pubmed/2289137> retrieved 17 June 2012, 17:57.
- [14] Rod R. Seeley, *Essentials of Anatomy & Physiology*, McGraw-Hill Science/Engineering/Math, 2006.
- [15] <http://cercor.oxfordjournals.org/content/20/1/205.full.pdf> retrieved 17 June 2012, 18:14.
- [16] <http://www.americanscientist.org/issues/pub/2002/3/diogenes-new-lamp> retrieved 17 June 2012, 18:16.
- [17] Michael Darmon, *Molecular Biology of the Skin: The Keratinocyte*, Academic Press, 1993.

FURTHER READING

- Abdel Haleem, *The Qur'an*, OUP Oxford, 2008.
- Abdul Wahid Hamid, *Islam the Natural Way*, MELS, 2004.
- <http://www.hamzatortzis.com/research/embryology-in-the-quran/> retrieved 17 June 2012, 18:36.



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